

**In the Matter of Alberta Energy and Utilities Board
Bitumen Conservation Requirements
Phase 3 Final Proceeding**

**Staff Submission Group
Addendum and Errata
Declaration and Supporting Evidence for the
Bitumen Conservation Phase 3 Final Hearing**

March 24, 2005

Contact

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1 Addendum and Errata for SSG Submissions dated February 14 and 17, 2005

Appendix 1

Replace Appendix 1 with the Appendix 1 attached to this submission.

Appendix 2

Replace Appendix 2 with the Appendix 2 attached to this submission.

Section 4.2 Divide McMurray FF, McMurray GG, McMurray II, McMurray JJ, and McMurray KK Pools

On Page 6, replace the paragraphs,

The 14-5 well is pooled with the channel gas at the 8-6-82-12W4 (McMurray II Pool) and 1-7-82-12W4 (McMurray KK Pool) wells. These were both previously considered to be single-well pools. The pooling of these three wells is based on similar gas/bitumen contact elevations (see below table).

Well ID	Sequence	Base of Gas (m ss)
14-5-82-12W4	B2 Sequence	Gas/Bitumen: 256.5
8-6-82-12W4	Channel	Gas/Bitumen: 255.5
1-7-82-12W4	Channel	Gas/Bitumen: 260.7

The available pressure and production data is consistent with this pool interpretation. In particular, the initial pressures at all three wells are similar. Although the B2 mudstone is present at the 14-5 well, the B2 gas is indirectly associated with potentially recoverable bitumen through pooling.

The SSG recommendation for the 14-5 well remains unchanged (i.e., shut in).

with,

The 14-5 well is pooled with the channel gas at the 8-6-82-12W4 (McMurray II Pool) and 1-7-82-12W4 (McMurray KK Pool) wells and with the B2 gas at the 11-1-82-13W4 (McMurray Y Pool) well. The 8-6 and 1-7 wells previously were interpreted to be single-well pools. The 11-1 well previously had been pooled with B2 channel gas at the 4-12-82-13W4 well. The pooling of these four wells is based on similar gas/bitumen contact elevations (see below table).

Well ID	Sequence	Base of Gas (m ss)
14-5-82-12W4	B2 Sequence	Gas/Bitumen: 256.5
8-6-82-12W4	Channel	Gas/Bitumen: 255.5
1-7-82-12W4	Channel	Gas/Bitumen: 260.7
11-1-82-13W4	B2 Sequence	Gas/Bitumen: 257.0

The available pressure and production data is consistent with this pool interpretation. In particular, the initial pressures at the 14-5, 8-6 and 1-7 wells are similar and the 11-1 well had a depleted initial pressure of 1346 kPaa (surface pressure corrected to sandface) taken on March 28, 1997, prior to any production from the McMurray Y Pool. The expected virgin pressure in the area is about 2075 kPaa.

Further, although the 4-12 well has a similar gas/bitumen contact elevation, it is interpreted to be a single well pool. This is because the 11-1 well was already significantly depleted in March 1997, while the 4-12 well had an initial/virgin pressure of 2127 kPaa (surface test) taken on March 8, 1998.

Although the B2 mudstone is present at the 14-5 and 11-1 wells, the B2 gas is indirectly associated with potentially recoverable bitumen through pooling.

The SSG recommendation for the 14-5 well remains unchanged (i.e., shut in) and the SSG recommendation for the 11-1 well is changed to shut in.

Section 4 Changes to Previous SSG Production Status Recommendations

Add the following section.

4.11 Hangingstone McMurray G3G, McMurray U, McMurray Undefined 102, and McMurray Undefined 118 Pools

The SSG has amalgamated the Hangingstone McMurray G3G, McMurray U, McMurray Undefined 102, and McMurray Undefined 118 Pools based on similar fluid contact elevations (see below table).

Well ID	RGS Pool	RGS Interpretation (m ss)	SSG Interpretation (m ss)
5-13-84-11W4/2	McMurray U	Channel Gas/Bitumen: 295.9	Channel Porosity Base: 296.7
13-13-84-11W4	McMurray Undefined 118	A2 Sequence Porosity Base: 298.4	Channel Porosity Base: 298.4
6-14-84-11W4	McMurray U	Channel Gas/Water: 296.7	Channel Gas/Water: 296.7
AA/6-14-84-11W4		Channel Gas pay not identified	Channel Gas/Water: 297.9
16-14-84-11W4	McMurray Undefined 102	Channel Gas/Water: 252*	Channel Gas/Water: 296.3
AA/9-15-84-11W4	Potential Gas	Channel Gas/Water: 297.3	Channel Gas/Water: 297.3
1-22-84-11W4	McMurray G3G	B1 Sequence Gas/Bitumen: 297.5	B1 Sequence Porosity Base: 297.5
AA/1-22-84-11W4	McMurray G3G	B1 Sequence Gas/Bitumen: 299.0	B1 Sequence Porosity Base: 299.0
F1/2-23-84-11W4		Not evaluated	Channel Gas/Water: 297.0

* The EUB database indicates the KB for the 16-14-84-11W4 well (McMurray Undefined 102 Pool) is 558.1 m. This appears to be in error. The well logs indicate the KB to be 602.4 m. The elevation of the gas/water contact using the well log KB more closely fits contact elevations in the offsetting wells.

The RGS identified the gas interval at the 13-13-84-11W4 well (McMurray Undefined 118 Pool) to be McMurray A2 sequence. The SSG interprets the A2 mudstone to be absent based on the log character between 314 to 315 mKB. The resistivity log would be expected to read 10 ohm-meters for A2 mudstone, but is reading 20 ohm-meters. The SSG interprets the gas interval to be McMurray channel.

The RGS assigned potential gas pay to McMurray channel at the AA/09-15-084-11W4 well with a gas/water interface at 297.3 m ss. The SSG interprets this well to have gas pay based on offsetting wells with gas in the same sequence with similar fluid contacts.

The base of McMurray B1 sequence gas at the 1-22 and AA/1-22-84-11W4 wells (McMurray G3G Pool) was interpreted in the RGS as a gas/bitumen contact. The SSG believes the lack of neutron-density crossover on the logs is a result of increased shaliness and is not reflecting a fluid change from gas to bitumen. As such, the SSG has revised the pay base in the B1 to porosity base.

The limited available pressure data is consistent with this pool interpretation. In particular, the initial well pressure at the 6-14-84-11W4 well (McMurray U Pool) of 2304 kPaa (static gradient corrected to MPP) taken on February 21, 1995, and the initial well pressure at the 1-22 well of 2257 kPaa (static gradient corrected to MPP) taken on February 15, 1995, are similar and were taken prior to production from the pool.

The SSG recommends that the AA/6-14, AA/9-15 and F1/2-23 wells be shut in. Further, the SSG recommendations for the 13-13, 1-22 and AA/1-22 are changed to shut in. The SSG continues to recommend that the 5-13, 6-14 and 16-14 wells be shut in.

Appendix 1 SSG Contested Wells and Intervals

	Field Name	Pool Name	Well ID	Stratigraphic Interval	Pay Top Depth	Pay Base Depth	SSG Previous Produce / Shut in	SSG New Produce / Shut in	Licensee
1	CHARD	WABISKAW K	00/11-28-080-06W4/0	Wbsk C Sand	280.2	283	Produce	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
2	CHARD	WABISKAW U/D-034	00/06-20-080-06W4/0	Wbsk C Sand	282	284	Produce	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
3	CHARD	WABISKAW U/D-037	00/07-13-080-07W4/0	Wbsk C Sand	307	307.6	Produce	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
4	CHARD	WABISKAW U/D-037	00/07-14-080-07W4/0	Wbsk C Sand	317	319	Produce	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
5	CHARD	WABISKAW U/D-037	00/10-23-080-07W4/0	Wbsk C Sand	312.5	314	Produce	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
6	CHARD	WABISKAW U/D-037	02/09-24-080-07W4/0	Wbsk C Sand	280.8	281.3	Produce	Shut-In	PETRO-CANADA
7	DIVIDE	MCMURRAY K	00/08-02-082-12W4/0	McM B2 Seq	497	498	Produce	Shut-In	STYLUS EXPLORATION INC.
8	DIVIDE	MCMURRAY Y	00/11-01-082-13W4/0	McM B2 Seq	439.8	441.2	Produce	Shut-In	HUSKY OIL OPERATIONS LIMITED
9	DIVIDE	MCMURRAY FF	00/07-09-082-12W4/0	McM B2 Seq	479.4	480.6	Produce	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
10	DIVIDE	MCMURRAY U/D-074	00/07-28-082-12W4/0	McM B2 Seq	412	415	Produce	Shut-In	STYLUS EXPLORATION INC.
11	DUNCAN	MCMURRAY YY	00/07-29-077-12W4/0	McM B1 Seq	451.5	452.2	Produce	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
12	HANGINGSTONE	WABISKAW A	00/11-35-082-08W4/0	Wbsk C Sand	443	444	Produce	Shut-In	NORTHSTAR ENERGY CORPORATION
13	HANGINGSTONE	WABISKAW A	00/07-02-083-08W4/0	Wbsk C Sand	448	448.5	Produce	Shut-In	NORTHSTAR ENERGY CORPORATION
14	HANGINGSTONE	WABISKAW-MCMURRAY D	00/08-07-081-07W4/0	McM A2 Seq	381	382.8	Shut-In	Shut-In	CALPINE CANADA RESOURCES COMPANY
15	HANGINGSTONE	WABISKAW-MCMURRAY D	00/06-17-081-07W4/0	McM A2 Seq	378.5	381.5	Shut-In	Shut-In	CALPINE CANADA RESOURCES COMPANY

	Field Name	Pool Name	Well ID	Stratigraphic Interval	Pay Top Depth	Pay Base Depth	SSG Previous Produce / Shut in	SSG New Produce / Shut in	Licensee
16	HANGINGSTONE	WABISKAW-MCMURRAY D	00/14-01-081-08W4/0	McM A1 Seq	399	402	Produce	Shut-In	NORTHSTAR ENERGY CORPORATION
17	HANGINGSTONE	WABISKAW-MCMURRAY D	00/11-13-081-08W4/0	McM A2 Seq	439.8	441.5	Shut-In	Shut-In	NORTHSTAR ENERGY CORPORATION
18	HANGINGSTONE	WABISKAW-MCMURRAY D	00/10-14-081-08W4/0	McM A2 Seq	453.2	456.2	Shut-In	Shut-In	NORTHSTAR ENERGY CORPORATION
19	HANGINGSTONE	MCMURRAY Y	00/10-09-082-09W4/0	McM A1 Seq	439.5	440.1	Produce	Shut-In	NORTHSTAR ENERGY CORPORATION
20	HANGINGSTONE	MCMURRAY KK	00/10-19-082-10W4/0	McM B1 Seq	425.5	426.8	Produce	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
21	HANGINGSTONE	MCMURRAY RRR	00/02-17-082-09W4/0	McM A1 Seq	437.5	439	Produce	Shut-In	NORTHSTAR ENERGY CORPORATION
22	HANGINGSTONE	MCMURRAY RRR	00/05-18-082-09W4/0	McM A1 Seq	427	427.3	Produce	Shut-In	NORTHSTAR ENERGY CORPORATION
23	HANGINGSTONE	MCMURRAY G3G	00/01-22-084-11W4/0	McM B1 Seq	292.2	294.2	Produce	Shut-In	NORTHSTAR ENERGY CORPORATION
24	HANGINGSTONE	MCMURRAY G3G	AA/01-22-084-11W4/0	McM B1 Seq	290.5	292	Produce	Shut-In	PETRO-CANADA
25	HANGINGSTONE	MCMURRAY U/D-118	00/13-13-084-11W4/0	McM Channel	310.2	311.5	Produce	Shut-In	PETRO-CANADA
26	HANGINGSTONE	MCMURRAY UNDEFINED	00/11-25-082-11W4/0	McM B2 Seq	433	437	Shut-In	Produce	PARAMOUNT ENERGY OPERATING CORP.
27	HARDY	WABISKAW A	00/03-15-077-04W4/0	Wbsk C Sand	331.2	335	Produce	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
28	HARDY	WABISKAW D	00/04-18-076-03W4/0	Wbsk C Sand	369.8	372.5	Produce	Shut-In	TALISMAN ENERGY INC.
29	HARDY	WABISKAW D	00/08-13-076-04W4/0	Wbsk C Sand	357.5	361	Produce	Shut-In	TALISMAN ENERGY INC.
30	HARDY	WABISKAW F	00/03-11-076-04W4/0	Wbsk C Sand	366.5	368.5	Produce	Shut-In	TALISMAN ENERGY INC.
31	HARDY	WABISKAW G	00/07-06-076-04W4/0	Wbsk C Sand	398	401	Produce	Shut-In	DEVON CANADA CORPORATION
32	HARDY	WABISKAW G	00/01-01-076-05W4/0	Wbsk C Sand	376.8	380	Produce	Shut-In	DEVON CANADA CORPORATION

	Field Name	Pool Name	Well ID	Stratigraphic Interval	Pay Top Depth	Pay Base Depth	SSG Previous Produce / Shut in	SSG New Produce / Shut in	Licensee
33	HARDY	WABISKAW U/D-011	00/11-30-075-04W4/0	Wbsk C Sand	381.7	387	Produce	Shut-In	STYLUS EXPLORATION INC.
34	HARDY	WABISKAW-MCMURRAY A	00/05-19-077-04W4/0	Wbsk C Sand	316	319	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
35	HARDY	WABISKAW-MCMURRAY A	00/06-20-077-04W4/0	Wbsk C Sand	336.5	339.4	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
36	HARDY	WABISKAW-MCMURRAY A	00/07-30-077-04W4/0	Wbsk C Sand	325.8	327.5	Shut-In	Shut-In	SUPERMAN RESOURCES INC.
37	HARDY	WABISKAW-MCMURRAY A	00/02-31-077-04W4/0	Wbsk C Sand	318.2	320	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
38	HARDY	WABISKAW-MCMURRAY A	00/04-13-077-05W4/0	Wbsk C Sand	332.8	334	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
39	HARDY	WABISKAW-MCMURRAY A	00/11-18-077-05W4/0	Wbsk C Sand	317	319	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
40	HARDY	WABISKAW-MCMURRAY A	00/11-19-077-05W4/0	Wbsk C Sand	316.6	317.3	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
41	HARDY	WABISKAW-MCMURRAY A	00/08-20-077-05W4/0	Wbsk C Sand	325	326.2	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
42	HARDY	WABISKAW-MCMURRAY A	00/11-21-077-05W4/0	Wbsk C Sand	322.5	323.5	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
43	HARDY	WABISKAW-MCMURRAY A	00/07-22-077-05W4/0	Wbsk C Sand	338.4	339.5	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
44	HARDY	WABISKAW-MCMURRAY A	00/05-24-077-05W4/0	Wbsk C Sand	343.8	346	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
45	HARDY	WABISKAW-MCMURRAY A	00/12-25-077-05W4/0	Wbsk C Sand	332.8	333.8	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
46	HARDY	WABISKAW-MCMURRAY A	00/07-26-077-05W4/0	Wbsk C Sand	342.5	343.5	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
47	HARDY	WABISKAW-MCMURRAY A	00/07-27-077-05W4/0	Wbsk C Sand	330.2	332	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
48	HARDY	WABISKAW-MCMURRAY A	00/11-28-077-05W4/0	Wbsk C Sand	324.2	326	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
49	HARDY	WABISKAW-MCMURRAY A	00/05-30-077-05W4/0	Wbsk C Sand	319	320.4	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED

	Field Name	Pool Name	Well ID	Stratigraphic Interval	Pay Top Depth	Pay Base Depth	SSG Previous Produce / Shut in	SSG New Produce / Shut in	Licensee
50	HARDY	WABISKAW-MCMURRAY A	00/10-33-077-05W4/0	Wbsk C Sand	337.2	338.5	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
51	HARDY	WABISKAW-MCMURRAY A	00/10-34-077-05W4/0	Wbsk C Sand	332.3	334	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
52	HARDY	WABISKAW-MCMURRAY A	00/05-35-077-05W4/0	Wbsk C Sand	338.5	339.5	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
53	HARDY	WABISKAW-MCMURRAY A	00/10-36-077-05W4/0	Wbsk C Sand	333	335	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
54	HARDY	WABISKAW-MCMURRAY A	00/09-36-077-06W4/0	Wbsk C Sand	322.3	324	Shut-In	Shut-In	DEVON CANADA CORPORATION
55	HARDY	WABISKAW-MCMURRAY A	00/08-06-078-04W4/0	Wbsk C Sand	323.7	324.7	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
56	HARDY	WABISKAW-MCMURRAY A	00/15-07-078-04W4/0	Wbsk C Sand	335.5	336.5	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
57	HARDY	WABISKAW-MCMURRAY A	00/08-01-078-05W4/0	Wbsk C Sand	329.1	330.4	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
58	HARDY	WABISKAW-MCMURRAY A	00/07-02-078-05W4/0	Wbsk C Sand	332.5	333	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
59	HARDY	WABISKAW-MCMURRAY A	00/05-04-078-05W4/0	Wbsk C Sand	338	338.8	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
60	HARDY	WABISKAW-MCMURRAY A	00/08-05-078-05W4/0	Wbsk C Sand	328.9	330	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
61	HARDY	WABISKAW-MCMURRAY A	00/05-07-078-05W4/0	Wbsk C Sand	332.1	332.8	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
62	HARDY	WABISKAW-MCMURRAY A	00/05-08-078-05W4/0	Wbsk C Sand	321	321.5	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
63	HARDY	WABISKAW-MCMURRAY A	00/06-12-078-05W4/0	Wbsk C Sand	333.1	334	Shut-In	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
64	HARDY	MCMURRAY U/D-074	00/07-30-077-04W4/0	McM Channel	338.5	342.5	Produce	Shut-In	SUPERMAN RESOURCES INC.
65	KIRBY	UPPER MANNVILLE I	00/10-08-074-06W4/0	Wbsk B Valley Fill	389	396	Produce	Shut-In	BP CANADA ENERGY COMPANY
66	KIRBY	UPPER MANNVILLE I	00/03-21-074-07W4/0	Wbsk B Valley Fill	442.5	444.5	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED

	Field Name	Pool Name	Well ID	Stratigraphic Interval	Pay Top Depth	Pay Base Depth	SSG Previous Produce / Shut in	SSG New Produce / Shut in	Licensee
67	KIRBY	UPPER MANNVILLE I	00/12-36-074-07W4/0	Wbsk B Valley Fill	395.8	398.7	Shut-In	Shut-In	BP CANADA ENERGY COMPANY
68	KIRBY	UPPER MANNVILLE I	00/11-05-075-06W4/0	Wbsk B Valley Fill	382.2	383.4	Shut-In	Shut-In	BP CANADA ENERGY COMPANY
69	KIRBY	UPPER MANNVILLE I	00/07-01-075-07W4/0	Wbsk B Valley Fill	384.2	386.2	Shut-In	Shut-In	BP CANADA ENERGY COMPANY
70	KIRBY	UPPER MANNVILLE O30	00/06-32-073-09W4/0	Wbsk B Valley Fill	426.8	427.8	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
71	KIRBY	UPPER MANNVILLE O30	00/16-33-073-09W4/0	Wbsk B Valley Fill	424.3	426.5	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
72	KIRBY	UPPER MANNVILLE O30	00/15-04-074-09W4/0	Wbsk B Valley Fill	424.5	428	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
73	KIRBY	UPPER MANNVILLE O30	00/16-05-074-09W4/0	Wbsk B Valley Fill	429.5	431	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
74	KIRBY	UPPER MANNVILLE O30	00/12-07-074-09W4/0	Wbsk B Valley Fill	446	447	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
75	KIRBY	UPPER MANNVILLE O30	00/11-08-074-09W4/0	Wbsk B Valley Fill	435.25	437.6	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
76	KIRBY	UPPER MANNVILLE O30	00/12-09-074-09W4/0	Wbsk B Valley Fill	424.5	428.5	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
77	KIRBY	UPPER MANNVILLE O30	00/06-17-074-09W4/0	Wbsk B Valley Fill	431.3	435	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
78	KIRBY	UPPER MANNVILLE O30	00/06-18-074-09W4/0	Wbsk B Valley Fill	440.5	442	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
79	KIRBY	UPPER MANNVILLE O30	00/16-12-074-10W4/0	Wbsk B Valley Fill	450	451	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
80	KIRBY	UPPER MANNVILLE O30	00/02-13-074-10W4/0	Wbsk B Valley Fill	446	447.5	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
81	KIRBY	UPPER MANNVILLE O30	00/02-24-074-10W4/0	Wbsk B Valley Fill	453	456	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
82	LEISMER	MCMURRAY Z3Z	00/12-36-079-07W4/0	McM B1 Seq	299.2	305.5	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
83	LEISMER	MCMURRAY I4I	00/05-20-079-07W4/0	McM B1 Channel	310.8	316.5	Produce	Shut-In	CANADIAN NATURAL RESOURCES LIMITED

	Field Name	Pool Name	Well ID	Stratigraphic Interval	Pay Top Depth	Pay Base Depth	SSG Previous Produce / Shut in	SSG New Produce / Shut in	Licensee
84	NEWBY	WABISKAW S	00/01-02-084-06W4/0	Wbsk C Sand	266.5	268	Produce	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
85	NEWBY	WABISKAW S	00/08-12-084-06W4/0	Wbsk C Sand	212	213	Produce	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
86	NEWBY	WABISKAW T	00/06-09-084-06W4/0	Wbsk C Sand	236.3	237.5	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
87	NEWBY	WABISKAW T	00/05-10-084-06W4/0	Wbsk C Sand	219.3	221	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
88	NEWBY	WABISKAW T	00/07-16-084-06W4/0	Wbsk C Sand	206	207	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
89	NEWBY	WABISKAW T	00/09-17-084-06W4/0	Wbsk C Sand	210.2	211	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
90	NEWBY	WABISKAW T	00/10-20-084-06W4/0	Wbsk C Sand	214.2	214.8	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
91	NEWBY	WABISKAW T	00/10-21-084-06W4/0	Wbsk C Sand	194.5	196	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
92	NEWBY	WABISKAW V	00/10-25-085-06W4/0	Wbsk C Sand	163.2	164.5	Produce	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
93	NEWBY	WABISKAW V	00/10-26-085-06W4/0	Wbsk C Sand	154.2	155	Produce	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
94	NEWBY	WABISKAW V	00/10-27-085-06W4/0	Wbsk C Sand	168	169.6	Produce	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
95	NEWBY	WABISKAW Y	00/12-14-084-06W4/0	Wbsk C Sand	203	204	Produce	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
96	NEWBY	WABISKAW AA	00/14-20-083-05W4/0	Wbsk C Sand	233.3	234	Produce	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
97	NEWBY	WABISKAW AA	00/06-30-083-05W4/0	Wbsk C Sand	258	259	Produce	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
98	NEWBY	WABISKAW U/D-050	AA/02-11-086-07W4/0	Wbsk C Sand	183	184.8	Produce	Shut-In	NEXEN CANADA LTD.
99	NEWBY	WABISKAW U/D-052	AA/06-23-086-07W4/0	Wbsk C Sand	173.8	176	Produce	Shut-In	OPTI CANADA INC.
100	NEWBY	WABISKAW U/D-052	AA/11-23-086-07W4/0	Wbsk C Sand	171	172.5	Produce	Shut-In	OPTI CANADA INC.

	Field Name	Pool Name	Well ID	Stratigraphic Interval	Pay Top Depth	Pay Base Depth	SSG Previous Produce / Shut in	SSG New Produce / Shut in	Licensee
101	NEWBY	WABISKAW U/D-052	AA/07-26-086-07W4/0	Wbsk C Sand	162	163.9	Produce	Shut-In	OPTI CANADA INC.
102	NEWBY	WABISKAW U/D-053	AA/06-28-086-07W4/0	Wbsk C Sand	185.3	186.7	Produce	Shut-In	CANNAT RESOURCES INC.
103	NEWBY	WABISKAW U/D-055	AA/07-33-086-07W4/0	Wbsk C Sand	169	170.5	Produce	Shut-In	CANNAT RESOURCES INC.
104	NEWBY	WABISKAW U/D-060	00/15-31-083-05W4/0	Wbsk C Sand	223	223.7	Produce	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
105	NEWBY	WABISKAW U/D-060	00/12-05-084-05W4/0	Wbsk C Sand	223.4	224.5	Produce	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
106	NEWBY	WABISKAW U/D-063	00/14-11-084-06W4/0	Wbsk C Sand	241.6	243	Produce	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
107	NEWBY	WABISKAW U/D-066	00/13-27-084-06W4/0	Wbsk C Sand	220.5	221.5	Shut-In	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
108	NEWBY	WABISKAW U/D-075	00/15-17-085-06W4/0	Wbsk C Sand	170.5	171.5	Produce	Shut-In	CANADIAN NATURAL RESOURCES LIMITED
109	NEWBY	WABISKAW U/D-081	AA/11-01-086-07W4/0	Wbsk C Sand	174.6	177	Produce	Shut-In	SUNCOR ENERGY INC.
110	RESDELN	WABISKAW U/D-012	00/05-07-084-06W4/0	Wbsk C Sand	305	306	Shut-In	Shut-In	PARAMOUNT RESOURCES LTD.
111	RESDELN	WABISKAW U/D-013	00/03-18-084-06W4/0	Wbsk C Sand	292.4	293.5	Produce	Shut-In	PARAMOUNT ENERGY OPERATING CORP.
112	THORNBURY	MCMURRAY X4X	00/11-27-079-11W4/0	McM B1 Seq	434	436	Produce	Shut-In	CANADIAN NATURAL RESOURCES LIMITED